IN THE CLAIMS

 (previously presented) An abrasive electrolyte solution adapted for thinning a layer on a substrate without contaminating the substrate, the abrasive electrolyte solution comprising:

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- an electrically conductive fluid that is substantially free of materials that are reactive within a desired operating voltage potential range and substantially free of materials that inhibit desired reactions within the desired operating voltage potential range,
- the electrically conductive fluid being chemically abrasive to the layer on the substrate, and
- abrasive particles having a size that is small enough for the particles to substantially remain in suspension in the electrically conductive fluid and is large enough for the particles to provide a desired degree of erosion of the layer on the substrate when the abrasive electrolyte solution is forced against the layer on the substrate.
 - (original) The abrasive electrolyte solution of claim 1, wherein the substrate is a semiconducting substrate including integrated circuits.
 - (original) The abrasive electrolyte solution of claim 1, wherein the layer comprises a first electrically conductive layer, an underlying non electrically conductive barrier layer, and an intervening electrically conductive seed layer.
 - (original) The abrasive electrolyte solution of claim 1, wherein the layer comprises copper.
 - (original) The abrasive electrolyte solution of claim 1, wherein the size of the abrasive particles is between about fifty nanometers and about two hundred and fifty nanometers.
 - (original) The abrasive electrolyte solution of claim 1, wherein the desired operating voltage potential range of the abrasive electrolyte solution is between about one tenth of a volt and about one hundred volts.

- 7. (original) The abrasive electrolyte solution of claim 1, wherein the desired reactions comprise oxidation of the layer on the substrate, where the layer is electrically conductive.
- 8. (original) The abrasive electrolyte solution of claim 1, wherein the desired reactions comprise oxidation of the layer on the substrate, where the layer is copper.
- 9. (canceled)
- 10. (canceled)
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